Listing of the Claims:

1. (Currently Amended) A burst electrode system comprising an electrode having an electroactive polymer [[having]] thereon, said electroactive polymer having a biologically active ingredient releasable from said electroactive polymer, [whereby] said burst electrode system exhibits a non Faradaic ~~biologically active ingredient~~ release profile when said biologically active ingredient is released.

2. (Original) The system of claim 1 wherein said biologically active ingredient is an anion.

3. (Original) The system of claim 1 wherein said electroactive polymer contains a dopant.

4. (Original) The system of claim 3 wherein said biologically active ingredient is a cation and said dopant is a polyanion.

5. (Original) The electrode system of Claim 1 wherein said non-Faradaic release profile is generated by application of a potential to said electrode system and said release is measured and compared with the amount of said applied potential generating said profile.

6. (Original) The electrode system of Claim 1 and 2 wherein said electroactive polymer comprises a polypyrrole polymer.

7. (Original) The electrode system of claim 1 wherein the electroactive polymer comprises poly(N-methyl pyrrole).

8. (Original) The electrode system of claim 3 wherein the electroactive polymer comprises poly(N-methyl pyrrole).

9. (Original) The electrode system of claim 4 wherein the electroactive polymer comprises poly (N-methyl pyrrole).

10. (Currently Amended) A burst electrode system comprising an electrode having an electroactive polymer [[having]] thereon, said electroactive polymer having a drug releasable from said electroactive polymer, whereby said burst electrode system exhibits a non Faradaic ~~drug~~ release profile when said drug is released.

11. (Original) The system of claim 10 wherein said polymer contains a dopant.

12. (Original) The system of claim 3 wherein the drug is a cation and the dopant is a polyanion.

13. (Original) The electrode system of Claim 10 wherein said non-Faradaic release profile is generated by application of a potential to said electrode system and said release is measured and compared with the amount of said applied potential generating said profile.

14. (Original) The electrode system of Claim 10 wherein said electroactive polymer comprises a polypyrrole polymer.

15. (Original) The electrode system of claims 10 wherein the electroactive polymer comprises poly(N-methyl pyrrole).

16. (Original) The electrode system of Claim 10 wherein said drug comprises phenylpropanol, pseudoephedrine, hydrocortisone, metaproternol, polymyxin, chloropheniramine, and erythromycin.

17. (Currently Amended) A burst electrode system comprising an electroactive polymer having thereon a drug releasable from said electroactive polymer, whereby said burst electrode system exhibits an exponential [[drug]] release profile ~~characterized by Figure 1~~ when said drug is released.

18. (Original) The burst electrode system of claim 17 wherein the drug is an anion.

19. (Original) The burst electrode system of claim 17 also comprising a dopant.

20. (Original) The burst electrode system of claim 19 wherein the dopant is a polyanion and the drug is a cation.

21. (Original) The electrode system of Claim 17 wherein said profile is generated by a single burst of a current or potential which causes a single release of a larger quantity of the drug than would be expected from a Faradaic release.

22. (Original) The electrode system of Claim 21 wherein said profile is characterized by the release of a disproportionately large amount of drug in proportion to voltage applied to said polymer.

23. (Original) The electrode system of Claim 18 wherein said electroactive polymer comprises polypyrrole.

24. (Original) The electrode system of Claim 20 wherein said electroactive polymer comprises polypyrrole/poly(styrene sulfonate).

25. (Original) The electrode system of Claim 24 where a second polymer layer comprises an overlayer.

26. (Original) The electrode system of Claim 25 where the overlayer is hydrophobic and crosslinked.

27. (Currently Amended) An article of manufacture comprising a burst electrode system having a non Faradaic drug release profile, which comprises an electrode

having an electroactive polymer thereon, said electroactive polymer containing a drug releasable from said electroactive polymer.

28. (Original) The article of manufacture of claim 27 further comprising a polyionic dopant.

29. (Original) The article of manufacture of Claim 27 wherein said polymer comprises a polypyrrole or poly(n-methyl pyrrole).

30. (Original) The article of manufacture of Claim 28 and 29 wherein said polyionic dopant is a polyanion and the drug is a cation.

31. (Original) The article of manufacture of Claims 29 and 30 wherein said drug comprises catecholamines (dopamine, norepinephrine, or metaproterenol), phenylpropanol amine, chloropheniramine, salicylic acid, pseudoephedrine, dichlophenac, erythromycin, hydrocortisone, metaproternol, or polymyxin.

32. (Original) A method of treating a patient using a burst electrode system, which comprises a burst electrode system comprising an electroactive polymer, loading said electroactive polymer with a drug releasable from said electroactive polymer and contacting said patient with said electrode system in an effective contacting manner so as to trigger the release of said drug from said electroactive polymer, whereby said drug is made effectively available to said patient.

33. (Original) The method of claim 32 where the loading of said electroactive polymer is further accomplished with a polyanionic dopant.

34. (Original) The method of Claim 33 wherein the drug is a cation.

35. (Original) The method of Claim 32 wherein the drug is an anion.

36. (Currently Amended) A burst electrode system comprising an electrode having an electroactive polymer [[having]] thereon, said electroactive polymer having a drug releasable from said electroactive polymer, whereby said burst electrode system exhibits a non Faradaic drug release profile and said drug is released during a reduction reaction.

37. (Original) The system of claim 36 also comprising a polyanionic dopant species incorporated into the electroactive polymer.

38. (Cancelled).

39. (Currently Amended) The [[method]] system of claim 37 wherein the reaction ~~wherein the~~ that releases the drug [[is released]] is an oxidation reaction.

40. (Currently Amended) The [[method]] system of claim [[38]] 36 wherein the drug released is an anionic drug.

41. (Original) The method of claim 39 wherein the drug released is a cationic drug.

42. (Original) The method of claim 41 wherein the drug is selected from the group consisting of salicylate, glutamate and ATP.

43. (Original) The method of claim 40 or 41 wherein the drug is a selected from the group comprising catecholamines (dopamine, norepinephrine, or metaproterenol), phenylpropanol amine, chloropheniramine, salicylic acid, pseudoephedrine, dichlophenac, erythromycin, hydrocortisone, metaproternol, or polymyxin.

44. (Currently Amended) A process of preparing a burst electrode whereby an electroactive polymer film is deposited on an electrode and various biologically active molecules are incorporated within said electroactive polymer film such that the release of [[a]] said various

biologically active molecules exhibit a non Faradaic release ~~are electrochemically stimulated from electroactive conducting polymers~~.

45. (Original) The process of claim 44 wherein the electroactive conducting polymers are selected from the group consisting of polypyrrole, poly(N-methyl pyrrole), substituted polypyrrole, polythiophene, polydioxythiophene and polyaniline.

46. (Original) The process of claim 44 wherein the films are loaded with either an anionic drug species or a polyanionic species as a dopant with a cationic species as a drug.

47. (Original) The process of claim 46 wherein the biologically active molecules are incorporated into the electroactive conducting polymers by using ions as the charge compensating dopant during electropolymerization.

48. (Original) The process of claim 44 wherein the biologically active molecules are incorporated into the electroactive conducting polymers by redox switching of the polymer film in a bathing electrolyte containing the biologically active molecules.

49. (Currently Amended) The [[method]] process of claim 47 wherein the biologically active molecules are drugs.

50. (Currently Amended) The [[method]] process of claim 48 wherein the biologically active molecules are drugs.

51. (Original) The process of claims 49 wherein the drugs are selected from the group comprising dopamine, norepinephrine, metaproterenol, phenylpropanol amine, chloropheniramine, salicylic acid, pseudoephedrine, dichlophenac, erythromycin, hydrocortisone, metaproternol, or polymyxin.

52. (Original) A method for preparing a burst electrode system wherein said process comprises electropolymerizing pyrrole by constant current polymerization in

polymerizable pyrrole and polystyrene sulfonate composition to form a polymer, loading a releasable drug on said polymer by constant potential reduction of said drug with said polymer in a composition to form an initial electrode system and thereafter removing said initial electrode system from said solution to allow equilibration of potential of said polymer outside said solution.

53. (Original) A method for preparing a burst electrode system wherein said process comprises electropolymerizing pyrrole by constant current polymerization in polymerizable pyrrole and polystyrene sulfonate composition to form a polymer, loading a releasable drug on said polymer by constant potential oxidation of said drug with said polymer in a composition to form an initial electrode system and thereafter removing said initial electrode system from said solution to allow equilibration of potential of said polymer outside said solution.